

**IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF MISSISSIPPI  
EASTERN DIVISION**

**ERNEST BRYANT**

**PLAINTIFF**

**V.**

**CIVIL ACTION NO. 2:13-CV-104-KS-MTP**

**3M COMPANY, et al.**

**DEFENDANTS**

**MEMORANDUM OPINION AND ORDER**

For the reasons stated below, the Court **grants** Defendant's Motion to Exclude [208] the testimony of Darell Bevis.

**I. BACKGROUND**

This is a product liability/silicosis case. Plaintiff worked around sandblasting for approximately one year in the late seventies. During that year, he spent approximately forty percent of his working time sandblasting or tending the sandblasting pot, while the rest was spent painting and cleaning. While Plaintiff was sandblasting or tending the pot, he wore a disposable, single-use respirator designed and manufactured by Defendant: the 3M 8710.

Plaintiff contends that he has pneumoconiosis caused in part by inhalation of silica because Defendant's respirator was defective. He asserted claims under the Mississippi Product Liability Act ("MPLA") for design, manufacturing, and warning defects. Defendant filed several motions [208, 210, 212, 226] to exclude the testimony of Plaintiff's proposed experts – Darell Bevis, Dr. Vernon Rose, and Dr. Steven Haber. The Court now considers Defendant's Motion to Exclude [208] the testimony of Darell

Bevis.

## **II. DISCUSSION**

According to his report [208-4], Bevis believes that the 3M 8710 is defective in three general ways. First, he claims that the 3M 8710 does not properly seal to the face because a “malleable aluminum strip across the nose area . . . relaxes and reshapes itself very quickly,” and the respirator’s “valveless design . . . promotes considerable condensed moisture collection on the paper which increases the pressure drop or breathing resistance causing the loss of rigidity and . . . seal leakage.” Second, Bevis stated that the “paper/fabric media” of the 8710 is “the lowest efficiency acceptable” under the pertinent regulations. Finally, Bevis maintains that the 8710's design makes it impossible to conduct a proper fit test or seal check. In light of these alleged defects, Bevis concluded that “the subject respirators did not provide sufficient protection to prevent inhalation exposure of Mr. Bryant to very substantial amounts of respirable silica.”

Federal Rule of Evidence 702 provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods;  
and

- (d) the expert has reliably applied the principles and methods to the facts of the case.

FED. R. EVID. 702. Therefore, “when expert testimony is offered, the trial judge must perform a screening function to ensure that the expert’s opinion is reliable and relevant to the facts at issue in the case.” *Watkins v. Telsmith, Inc.*, 121 F.3d 984, 988-89 (5th Cir. 1997).

In *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 113 S. Ct. 2786, 125 L. Ed. 2d 469 (1993), the Supreme Court provided a nonexclusive list of “general observations intended to guide a district court’s evaluation of scientific evidence,” including: “whether a theory or technique can be (and has been) tested, whether it has been subjected to peer review and publication, the known or potential rate of error, and the existence and maintenance of standards controlling the technique’s operation, as well as general acceptance.” *Id.* at 989 (punctuation omitted).

Not every guidepost outlined in *Daubert* will necessarily apply to expert testimony based on engineering principles and practical experience, but the district court’s preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue is no less important.

*Id.* at 990-91 (punctuation omitted).

“Overall, the trial court must strive to ensure that the expert, whether basing testimony on professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” *Id.* The testimony must be supported by “more than subjective belief or unsupported speculation.” *Paz v. Brush Eng’red Materials, Inc.*, 555 F.3d 383, 388

(5th Cir. 2009). However, the Court’s rule as gatekeeper is not meant to supplant the adversary system because “[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” *Daubert*, 509 U.S. at 596. While the Court should focus solely on the proposed expert’s “principles and methodology, not on the conclusions that they generate,” *Daubert*, 509 U.S. at 595, 113 S. Ct. 2786, “nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence which is connected to existing data only by the *ipse dixit* of the expert.” *GE v. Joiner*, 522 U.S. 136, 146, 118 S. Ct. 512, 139 L. Ed. 2d 508 (1997).

“The proponent of expert testimony . . . has the burden of showing that the testimony is reliable,” *United States v. Hicks*, 389 F.3d 514, 525 (5th Cir. 2004), and must establish the admissibility requirements “by a preponderance of the evidence.” *United States v. Fullwood*, 342 F.3d 409, 412 (5th Cir. 2003).

#### **A. Qualification**

First, Defendant argues that Bevis is not qualified to provide expert testimony because he has no specialized knowledge, skill, experience, training, or education in respirator design or manufacturing. “Whether a witness is qualified to testify as an expert is left to the sound discretion of the trial judge, who is in the best position to determine both the claimed expertise of the witness and the helpfulness of his testimony.” *Sullivan v. Rowan Cos.*, 952 F.2d 141, 144 (5th Cir. 1992). The proponent of expert testimony must establish the expert’s qualifications by a preponderance of the

evidence. *United States v. Griffith*, 118 F.3d 318, 322 (5th Cir. 1997).

Rule 702 provides that an expert may be qualified by “knowledge, skill, experience, training, or education . . .” FED. R. EVID. 702. Expert testimony “serves to inform the jury about affairs not within the understanding of the average man.” *United States v. Moore*, 997 F.2d 55, 57 (5th Cir. 1993). Therefore, “[a] district court should refuse to allow an expert witness to testify if it finds that the witness is not qualified to testify in a particular field or on a given subject.” *Wilson v. Woods*, 163 F.3d 935, 937 (5th Cir. 1999). A proposed expert does not have to be “highly qualified in order to testify about a given issue. Differences in expertise bear chiefly on the weight to be assigned to the testimony by the trier of fact, not its admissibility.” *Huss v. Gayden*, 571 F.3d 442, 452 (5th Cir. 2009). Likewise, “[a] lack of personal experience . . . should not ordinarily disqualify an expert, so long as the expert is qualified based on some other factor provided by Rule 702 . . .” *United States v. Wen Chyu Liu*, 716 F.3d 159, 168 (5th Cir. 2013). However, regardless of its source, “the witness’s . . . specialized knowledge,” must be “sufficiently related to the issues and evidence before the trier of fact that the witness’s proposed testimony will help the trier of fact.” *Id.* at 167.

Bevis has a high school education. He describes himself as an “industrial hygienist,” but he is not certified by any organization in the field of industrial hygiene. Likewise, he is not currently a member of any professional association. He has never designed or manufactured a respirator or any of its component parts. He holds no patents for respirator design. His opinions regarding respirator design have never been submitted to peer review or scientific scrutiny. In fact, he has never published his

opinions concerning respirator design and filtration in any publication whatsoever.

According to his CV [220-5], forty years ago he worked as an industrial hygiene technician at Los Alamos National Laboratory at the University of California. In deposition,<sup>1</sup> he described his position as a “junior industrial hygiene technician,” despite referring to himself as a “senior industrial hygiene technician” on his CV. He claims to have worked with and been trained by an individual named Ed Hyatt, who was purportedly an expert in industrial hygiene, filtration mediums, and respirator design. However, when asked to produce documentation of this research and training, he claimed that the records had been destroyed. Regardless, he admitted that none of the results of this “bootleg research,” as he described it, were ever published. He also claims to have conducted testing on prototypes of the 3M 8710, but he could not provide any documentation of such testing. He also admitted that he did not know what material the 3M 8710 was made of.

For the past forty years, Bevis has earned a living as an industrial hygiene “consultant” and by providing expert testimony. He offers training courses in how to properly wear and use respirators. Most of his courses apparently concern “fit testing” and “user seal checks” – techniques to ensure that a respirator properly fits the person wearing it and seals to provide maximum protection.

In summary, Bevis’s deposition testimony, report, and CV demonstrate that he

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<sup>1</sup>Plaintiff’s counsel has apparently retained Bevis in numerous prior cases, and the parties agreed to rely on his previous sworn testimony. Several deposition transcript excerpts are in the record, and the Court will refer to them collectively.

is qualified to provide expert testimony about the *proper use* of respirators, including fit testing and user seal checks. However, Plaintiff has failed to demonstrate that Bevis is qualified to provide expert testimony as to the *design and manufacture* of respirators. The record contains no evidence that Bevis has any documented education, experience, training, or skill in designing and fabricating respirators. His unsupported testimony concerning alleged “bootleg research” and destroyed research notebooks is not sufficient. Being qualified to provide expert testimony about proper respirator use does not qualify one to provide expert testimony about respirator design and manufacturing.<sup>2</sup> “Even where a witness has special knowledge or experience, qualification to testify as an expert also requires that the area of the witness’s competence matches the subject matter of the witness’s testimony.” 29 Charles Alan Wright, Arthur R. Miller, & Victor James Gold, *Federal Practice and Procedure* § 6265 (1st ed. 2014).

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<sup>2</sup>*Cf. Smith v. Goodyear Tire & Rubber Co.*, 495 F.3d 224, 227 (5th Cir. 2007) (polymer scientist was not qualified to provide expert testimony about tire design); *Previto v. Ryobi N. Am., Inc.*, 766 F. Supp. 2d 759, 765-66 (S.D. Miss. 2010) (“human factors” expert was not qualified to provide expert testimony concerning accident reconstruction, design, quality control, or manufacturing); *Runnels v. Tahsin Indus. Corp., USA*, No. 3:11-CV-106-CWR-FKB, 2013 WL 6834632, at \*5-\*6 (S.D. Miss. Dec. 23, 2012) (expert in “materials science” was qualified to provide expert testimony about quality and strength of metal, but not about warnings, instructions, assembly, installation, or usage of the product made from the metal); *Wallace v. Ford Motor Co.*, No. 3:11-CV-567-CWR-FKB, 2013 U.S. Dist. LEXIS 91164, at \*6-\*8 (S.D. Miss. June 28, 2013) (accident reconstruction experts were not qualified to provide expert testimony about alleged manufacturing defect); *Weatherspoon v. Nissan N. Am., Inc.*, No. 3:07-CV-24-DPJ-LRA, 2010 U.S. Dist. LEXIS 21329, at \*20-\*21 (S.D. Miss. Feb. 17, 2010) (biomechanical engineer was not qualified to provide expert testimony about deformation of automobile frame during crash).

Accordingly, the Court finds that Darell Bevis is not qualified to testify as an expert in respirator design and manufacturing. At a minimum, this bars his testimony concerning the following allegedly defective design elements of the 3M 8710: the “malleable aluminum strip,” the “valveless design,” and the “paper/fabric media.”

### **B. Reliability**

Defendant also argues that Bevis’s opinions are unreliable because they are based upon insufficient data. The reliability of proposed expert testimony “is determined by assessing whether the reasoning or methodology underlying the testimony is scientifically valid.” *Knight v. Kirby Inland Marine, Inc.*, 482 F.3d 347, 352 (5th Cir. 2007). “[T]he expert’s testimony must be reliable at each and every step or it is inadmissible. The reliability analysis applies to all aspects of an expert’s testimony: the methodology, the facts underlying the expert’s opinion, the link between the facts and the conclusion, *et alia*.” *Seaman v. Seacor Marine LLC*, 326 F. App’x 721, 725 (5th Cir. 2009) (alteration original). Therefore, “[t]he . . . reliability of expert testimony turns upon its nature and the purpose for which its proponent offers it.” *United States v. Valencia*, 600 F.3d 389, 424 (5th Cir. 2010).

Rule 702 specifically requires that an expert’s testimony be based upon sufficient facts or data. Fed. R. Evid. 702(b). Phrased differently, proposed expert testimony “must be supported by appropriate validation – i.e., good grounds, based on what is known.” *Daubert*, 509 U.S. at 590 (punctuation omitted). Therefore, “[w]here an expert’s opinion is based on insufficient information, the analysis is unreliable.” *Paz*, 555 F.3d at 388; *see also Seaman*, 326 F. App’x at 725. “[A] district court has broad



discretion to determine whether a body of evidence relied upon by an expert is sufficient to support that expert's opinion." *Knight*, 482 F.3d at 354.

Bevis's overall opinion that the 3M 8710 "did not provide sufficient protection to prevent inhalation exposure of Mr. Bryant to very substantial amounts of respirable silica" is not supported by sufficient data. Bevis admitted that air sampling was important in determining the efficacy of a respirator. He stated: "[T]here's no way that – without sampling data and information on the substance, its concentration, the toxicity and et cetera, you can't make proper respirator selection." He affirmed that one could not determine the level of exposure based on anecdotal evidence alone, and he admitted that the 3M 8710 provides sufficient protection up to a certain exposure limit.

Bevis also admitted that he did not know 1) how much time Plaintiff spent sandblasting or tending the sandblasting pot, 2) the pressure setting on the sandblaster Plaintiff allegedly used, 3) how much time Plaintiff spent at worksites where sandblasting occurred, or 4) the type or concentration of silica to which Plaintiff was allegedly exposed. He admitted that he had never spoken with any of Plaintiff's family members, former co-workers, physicians, retained experts, or former employers in an effort to discover more facts about Plaintiff's exposure. He has no information whatsoever about the extent of Plaintiff's exposure, except the bare fact that he once worked as a sandblaster.

In summary, Bevis admitted that the 3M 8710 was effective to a certain exposure limit. He also admitted that one needed to know the type and concentration of silica to determine the efficacy of a respirator. Finally, he admitted that he knows

nothing about Plaintiff's alleged exposure. Under these circumstances, it is impossible for Bevis to provide a reliable opinion as to whether the 3M 8710 provided Plaintiff with sufficient protection from airborne silica. Accordingly, the Court excludes his overall opinion that the 3M 8710 "did not provide sufficient protection to prevent inhalation exposure of Mr. Bryant to very substantial amounts of respirable silica."

### **C. *Relevance***

Defendant also argues that some of Bevis's opinions are irrelevant to the issues of this case. Bevis testified that it was impossible to conduct a proper fit test and user seal check of the 3M 8710 because of its allegedly inadequate design. Defendant contends that this testimony is irrelevant insofar as it is undisputed that neither Plaintiff nor his employer attempted to conduct any fit tests or seal checks.

Rule 702 requires that expert testimony "help the trier of fact to understand the evidence or to determine a fact in issue . . . ." FED. R. EVID. 702(a). The "relevance prong requires the proponent to demonstrate that the expert's reasoning or methodology can be properly applied to the facts in issue." *Johnson v. Arkema, Inc.*, 685 F.3d 452, 459 (5th Cir. 2012) (punctuation omitted). In other words, "[e]xpert testimony which does not relate to any issue in the case is not relevant, and ergo, non-helpful." *Roman v. W. Mfg., Inc.*, 691 F.3d 686, 694 (5th Cir. 2012); *see also* FED. R. EVID. 401.

Plaintiff testified that his former employer did not provide instruction regarding seal checks or fit testing of the respirator. He likewise testified that he never attempted to perform a fit test or seal check when he was using the 3M 8710. Bevis

admitted these facts in his deposition. Therefore, even if the 3M 8710's design rendered it impossible to conduct proper fit tests and seal checks, that has no bearing on Plaintiff's alleged injuries. If Plaintiff did not and would not have conducted fit tests or seal checks, the inability to do so properly is irrelevant.

### **III. CONCLUSION**

For the reasons provided above, the Court **grants** Defendant's Motion to Exclude [208] the testimony of Darell Bevis. The Court excludes Bevis's opinions regarding the 3M 8710's alleged design defects, the alleged inability to perform proper fit tests and seal checks, and his overall opinion that the "respirators did not provide sufficient protection to prevent inhalation exposure of Mr. Bryant to very substantial amounts of respirable silica."

SO ORDERED AND ADJUDGED this 27<sup>th</sup> day of February, 2015.

*s/ Keith Starrett*  
UNITED STATES DISTRICT JUDGE